# CD - SACD - DVD Player - PULSAR SADV 1250 R HD



T+A is introducing four new disc players covering the most important music and video formats. They are based on the converter technology of the preceding series, which provides superior sound quality, but now feature high-end loaders, mechanisms and decoders which are completely new developments. These innovations have brought a significant improvement in mechanical quality as well as enhanced disc reading and playback characteristics. The disc mechanism is equipped with absolutely top-quality components: heavy-duty motors from Mabuchi, a sub-chassis with excellent damping, steel pushrods, aluminium / ABS laminate disc drawer and metal encapsulation. The disc mechanism is suspended in a solid, special coated anti-resonance housing with a three-point mounting. The net result is that all four models feature the latest and most compact disc mechanism / loader design available on the world market.

The T+A philosophy of audio playback is unique: each music format has its own independent signal processing section with clock resynchronisation for jitter reduction and accurately D/A converter timing, i.e. CD and stereo signals are processed in exactly the same way as in our high-end CD players, and are reproduced to the highest standards of quality via separate stereo outputs.

#### **Characteristics**

#### **Consistent multi-channel sound**

The **SADV 1250 R** is a six-channel (multi-channel) disc player which reproduces top-quality two-channel and multi-channel audio from CD, SACD and DVD-V, and also features a superb video processing section. Its outstanding performance is due on the one hand to the professional video board, and on the other to the HDMI/YUV output board.

### No-compromise AUDIO design

The T+A philosophy of audio playback is unique: each music format has its own independent signal processing section with clock and data resynchronisation for jitter reduction and accurately matched sample rates, i.e. CD, SACD and DVD audio signals are processed exactly the best method for each format, and are reproduced to the highest standards of quality via separate stereo outputs. For SACD (multi-channel) we employ a separate processor-controlled signal processing section incorporating eight converters, and transfer the analogue signals to the highest standards of quality via six outputs. A jitter-free digital output is available for audio formats; the design is identical to that of the SACD 1250 R.

#### Video signal processing

Although digital HDMI video outputs are steadily gaining in importance, it is still essential to generate really high-quality analogue video outputs, as these can offer superb picture quality in conjunction with a first-class monitor. For this reason our engineers have developed a professional video board incorporating the superior 12-bit / 216 MHz video DAC from ANALOG DEVICES for the Scart (RGB), S-Video and video outputs. The HDMI output board is fitted with a programmable video processor which exploits the latest algorithms in order to supply progressive scan signals; it is capable of increasing picture resolution to 720p or 1080i. These features make the machine the ideal picture source for monitors and projectors with an HDMI input, or -ideally- for the new T+A <u>VSP 1250R</u> <u>video processor / scaler!</u>

## Design a. Connection



- DSP-Signalprocessor, programmable, updateable, controlls the signal processing individually for CD, SACD and DVD.
- New High-End-mechanism with metal-loader, steel pushrods, metal shielding, antiresonanz cabinet and decoupling.
- 8 channel High-End-D/A-converter and State-of-the-Art-Analogue output stage
- Prof-Videoboard with broad-band (150 MHz) OP-amps ensure superb picture quality at the analogue outputs
- High-End HDMI output/Scaler-board up to 1080i.
- Mains power supplies with vast current delivery for analogue and digital sections



- Stereo und Multi channel-High-End analogue output.
- Switch for Wide-Modus.
- AV OUT: Scart (RGB), S-Video, Video, Digital Out.
- HDMI- and YUV- output with Scaling selection.

R-Link System remote control, RS 232 control and update interface

## The loader

The disc mechanism is equipped with absolutely top-quality components: heavy-duty motors from Mabuchi, a sub-chassis with excellent damping, steel pushrods, aluminium / ABS laminate disc drawer and metal encapsulation. The disc mechanism is suspended in a solid, special coated anti-resonance housing with a three-point mounting.



The net result is that all four models feature the latest and most compact disc mechanism / loader design available on the world market.

#### The Converter

A common feature of these two superb players is the unique and extremely sophisticated D/A converter board / analogue board. Burr-Brown D/A converters are acknowledged as the best in the field, and no fewer than eight carefully selected units are used in each machine, although they are used in different ways in the SACD 1250 R and SADV 1250 R HD.

Two of the eight converters in the **SADV 1250 R** multi-channel player are used as differential converters for each of the front channels, while the other four are used to convert the signals for the centre, surround and subwoofer channels. The video board also features an additional separate stereo D/A converter which generates a stereo signal even from multi-channel DVDs.



This makes very good sense for multi-room operation (e.g. using our **SR 1525 R**), or for making recordings with a video recorder. This separate converter also eliminates the danger that interference from the TV set or video recorder might find their way into the sensitive audio section.

A programmable 56-bit signal processor is employed to provide faultless digital control of the converter units, and this, in conjunction with the superior T+A oversampling algorithms, ensures that the player is able to exploit the full performance potential of the D/A converters. The listener can choose between no fewer than four selectable

mathematical processes for the eight-times oversampling: from the conventional FIR (highly linear frequency response) to T+A Bezier polynomial interpolation with its unexcelled timing precision; the latter sounding extraordinarily authentic and "analogue" in character. These two sections are strictly separated galvanically by the latest iCouplers and opto-couplers, to prevent any danger of the digital section influencing the audiophile analogue section.

State-of-the-Art analog output stage with switchable filters

4 Stereo D/A-converters

Opto-couplers and iCouplers separate the analog section strictly from the digital section

Programmable 56-Bit DSP-Signalprocessor

## **Specifications**

#### **Formats**

Audio CD, CD-R / CD-RW, MP3-CD

SACD-Stereo + Multi channel

Video DVD, DVD+R / +RW, DVD-R / -RW

VCD, SVCD

Picture CD (JPEG)

#### **Video Section**

TV-Standard PAL, NTSC

Video-format MPEG 1 for VCD

MPEG 2 for DVD

HD-Outputs 480p / 576p, 720p, 1080i

SD-Outputs 480i / 576i

Video D/A-Converter 12-Bit / 216 MHz

Bandwith 12.5 MHz (Luma), 6 MHz (Chroma)

#### **Audio Section**

Audio-outputs (analogue) 1 x Stereo 2,5Veff / 22 Ohm

6 Channel Multichannel

Stereo (TV Downmix)

Audio-outputs (digital) 1 x coax

1 x optical

IEC 60958 (CDDA / LPCM)

IEC 61937 (MPEG 1/2, Dolby Digital, dts)

D /A Converter 24-Bit, 384 kHz Sigma/Delta

Double-Mono-Differenzial-converter

8-time Oversampling

# Frequency responce / eff. system dynamics

CD 2 Hz - 20 kHz / 100 dB

SACD 2 Hz - 44 kHz / 110 dB

*DVD-V* 2 Hz - 22 kHz / 100 dB

DVD 96/24 2 Hz - 44 kHz / 110 dB

Total harmonic distortion < 0,001 %

Signal / noise 115 dB

Channel separation 110 dB

#### General

Remote control via R-System

Dimensions ( $H \times W \times D$ ) 7,5 x 44 x 39 cm Finishes silver, black

we reserve the rights to alter technical specifications